

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

MICHAEL ABRACZINSKAS  
Director



TBD

Mr. John T. Cook  
Vice President, Asset Management  
North Carolina Electric Membership Corporation – Hamlet Plant  
3400 Sumner Boulevard  
Raleigh, North Carolina 27616

SUBJECT: Air Quality Permit No. 09488T10  
Facility ID: 7700082  
North Carolina Electric Membership Corporation – Hamlet Plant  
Hamlet, Richmond County, North Carolina  
Fee Class: Title V  
PSD Class: Major

Dear Mr. Cook:

In accordance with your completed Air Quality Permit Applications for renewal of your Title V and Title IV permits, received February 26, 2020, we are forwarding herewith Air Quality Permit No. 09488T10 to the North Carolina Electric Membership Corporation – Hamlet Plant located at 162 Cooperative Way, Hamlet, North Carolina, authorizing the construction and operation, of the emission sources and associated air pollution control devices specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT" to this cover letter. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the conditions of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



North Carolina Department of Environmental Quality | Division of Air Quality  
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641  
919.707.8400

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Richmond County has triggered Increment Tracking for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub>. It is not expected that these renewal applications will consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from TBD until TBD+5 years, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or [russell.braswell@ncdenr.gov](mailto:russell.braswell@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NCDEQ

Attachments

- c: Kelly Fortin, EPA Region 4 (with review)
- Connie Horne (cover page only)
- Fayetteville Regional Office
- Central Files

ATTACHMENT to Cover Letter to Air Quality Permit 09488T10  
North Carolina Electric Membership Corporation – Hamlet Plant

**Table of Changes**

The following table lists the changes made to Permit 09488T09:

Page*	Section*	Description of Changes
Throughout	Throughout	<ul style="list-style-type: none"><li>• Updated dates and permit numbers.</li><li>• Fixed formatting.</li></ul>
4	2.1 A.1	<ul style="list-style-type: none"><li>• Added recordkeeping and reporting requirement for the hours of operation of each turbine in Units 1 through 5.</li></ul>
7	2.1 B.1	<ul style="list-style-type: none"><li>• Added recordkeeping and reporting requirement for the hours of operation of Unit 6.</li><li>• Added requirement to use NSPS compliance methods to demonstrate compliance with the NO<sub>x</sub> concentration limit and fuel sulfur limit.</li></ul>
13	2.2 A.3	<ul style="list-style-type: none"><li>• Clarified that the NO<sub>x</sub> limit is based on firing 50% or more of natural gas or fuel oil.</li><li>• Included the "good work practices" requirement per 40 CFR 60.4333.</li></ul>
16	2.5	<ul style="list-style-type: none"><li>• Removed references to 02D .2400 because this rule has expired and no longer includes any text.</li></ul>
17	3	<ul style="list-style-type: none"><li>• Updated General Conditions to v5.3.</li></ul>

\* This refers to the current permit unless otherwise stated.

### **Insignificant Activities per 15A NCAC 02Q .0503(8)**

ID Nos.	Emission Source Description
IES-11	One 500,000 gallon No. 2 fuel oil storage tank
IES-12	One 500,000 gallon No. 2 fuel oil storage tank
IES-13	One natural gas-fired heater (2.0 million Btu per hour heat input)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:  
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.



State of North Carolina  
Department of Environmental Quality  
Division of Air Quality

## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Issue Date	Expiration Date
09488T10	09488T09	TBD	TBD+5 years

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee:** North Carolina Electric Membership Corporation –  
Hamlet Plant

**Facility ID:** 7700082

**Facility Site Location:** 162 Cooperative Way  
**City, County, State, Zip:** Hamlet, Richmond County, North Carolina 28345

**Mailing Address:** 3400 Summer Boulevard  
**City, State, Zip:** Raleigh, North Carolina 27616

**Application Numbers:** 7700082.20A & .20B  
**Complete Application Date:** February 26, 2020

**Primary SIC Code:** 4911  
**Division of Air Quality,** Fayetteville Regional Office  
**Regional Office Address:** 225 Green St, Suite 714  
Fayetteville, North Carolina 28301

Permit issued this the TBD.

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William D. Willets, P.E., Chief, Permitting Section  
By Authority of the Environmental Management Commission

## **Table Of Contents**

SECTION 1: PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.2 - Multiple Emission Sources Specific Limitations and Conditions

2.3 - Acid Rain Permit Requirements

2.4 - Cross State Air Pollution Rule (CSAPR) requirements

2.5 - Permit Shield for Non-applicable Requirements

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

Acid Rain Permit Application, signed February 18, 2020

## SECTION 1 - PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROLS AND APPURTENANCES

The following table contains a summary of all permit emission sources and associated air pollution control devices and appurtenances:

Page	Emission Source ID No.	Emissions Source Description	Control Device ID No.	Control Device Description
	ES-1A and ES-1B, ES-2A and ES-2B, ES-3A and ES-3B, ES-4A and ES-4B, ES-5A and ES-5B  (NSPS, KKKK; PSD)	Ten Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbines* (300 million Btu per hour, each, nominal heat input capacity when firing natural gas, and 281 million Btu per hour, each, nominal heat input capacity when firing ultra-low sulfur No. 2 fuel oil) with one generator per pair of turbines	CD-1A and CD-1B, CD-2A and CD-2B, CD-3A and CD-3B, CD-4A and CD-4B, CD-5A and CD-5B	Water injection systems (one per turbine)
	ES-6A and ES-6B  (NSPS, KKKK; PSD)	Two Pratt & Whitney FT8 Swift-Pac simple-cycle gas turbines* (314.4 million Btu per hour, each, nominal heat input capacity when firing natural gas, and 285.5 million Btu per hour nominal heat input capacity when firing ultra-low sulfur No. 2 fuel oil) with one generator per pair of turbines	CD-6A and CD-6B	Water injection systems (one per turbine)

\* Diffusion flame turbine

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1 - Emission Sources and Control Devices Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

**A. Ten simple cycle, natural gas/No. 2 fuel oil-fired combustion turbines (ID Nos. ES-1A and B through ES-5A and B), each with associated water injection (ID No. CD-1A and B through CD-6A and B)**

The following table provides a summary of limits and standards for the emissions sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Visible emissions	20 percent opacity <b>See Section 2.2 A.1</b>	15A NCAC 02D .0521
Sulfur dioxide	<ul style="list-style-type: none"> <li>Any fuel: Not to exceed total sulfur content of 0.05 wt% (500 ppm); OR</li> <li>Any fuel: Not to exceed total sulfur content of 0.06 lb/MMBtu heat input; OR</li> <li>Exit gases: Not to discharge sulfur dioxide emissions in excess of 0.90 pounds per megawatt-hour gross output</li> </ul> <b>See Section 2.2 A.2</b>	15A NCAC 02D .0524 (40 CFR Part 60, Subpart KKKK)
	Phase II Acid Rain permit requirements <b>See Section 2.3</b>	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rule (CSAPR) requirements <b>See Section 2.4</b>	40 CFR Part 97, Subpart CCCCC
Nitrogen oxides	No. 2 fuel oil: 74 ppm at 15 percent O <sub>2</sub> (4-hour rolling average) Natural gas: 25 ppm at 15 percent O <sub>2</sub> (4-hour rolling average) <b>See Section 2.2 A.3</b>	15A NCAC 02D .0524 (40 CFR Part 60, Subpart KKKK)
	Less than 245 tons per consecutive 12 months	15A NCAC 02Q .0317 (PSD Avoidance)
	Phase II Acid Rain permit requirements <b>See Section 2.3</b>	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rule (CSAPR) requirements <b>See Section 2.4</b>	40 CFR Part 97, Subparts AAAAA and BBBBB
Carbon monoxide	<ul style="list-style-type: none"> <li>Hours of operation (hours represent non startup/shutdown periods):               <ul style="list-style-type: none"> <li>Limit of 1,498 hours per year per turbine maximum operation when firing natural gas, and</li> <li>Limit of 872 hours per year per turbine when firing No. 2 fuel oil (<math>\leq 0.002</math> % sulfur by wt.)</li> </ul> </li> <li>BACT emission limits (See Section 2.1 A.1)</li> </ul>	15A NCAC 02D .0530
Toxic air pollutants	<b>State-enforceable only</b> <b>See Section 2.2 A.4</b>	15A NCAC 02D .1100

#### 1. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to comply with the best available control technology (BACT) determination pursuant to 15A NCAC 02D .0530, "Prevention of Significant Deterioration", carbon monoxide (CO) emissions from



these sources (**ID Nos. ES-1A and B through ES-5A and B**, i.e. Units 1 through 5) shall be controlled such that total emissions shall not exceed 401.47 tons per consecutive 12-month period.

- b. Each turbine in Units 1 through 5 shall have a maximum operation of no more than 1,498 hours per year per turbine when firing natural gas and a maximum operation of no more than 872 hours per year per turbine when firing ultra-low sulfur No. 2 fuel oil, where hours represent non-startup/shutdown periods.
- c. CO emissions from each turbine in Units 1 through 5 shall be less than the limits in Tables 1 and 2, below:

Table 1: While firing natural gas									
Combustion turbine load	Less than or equal to 100% but greater than 75%			Less than or equal to 75% but greater than 50%			Less than or equal to 50%		
Ambient temperature (°F)	32	59	90	32	59	90	32	59	90
BACT CO Emission Limits (lb/hr)	61.12	45.48	43.82	79.74	64.5	48.05	78.85	63.34	57.72

Table 2: While firing ultra-low sulfur No. 2 fuel oil									
Combustion turbine load	Less than or equal to 100% but greater than 75%			Less than or equal to 75% but greater than 50%			Less than or equal to 50%		
Ambient temperature (°F)	32	59	90	32	59	90	32	59	90
BACT CO Emission Limits (lb/hr)	13.23	10.25	8.83	16.11	12.52	10.11	18.97	15.35	12.07

**Testing** [15A NCAC 02Q .0508(f)]

- d. The Permittee has completed initial performance testing for Units 1 through 5.<sup>1</sup>
- e. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Sections 2.1 A.1.a through c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- f. Each month, the Permittee shall record the hours of operation (as defined in Section 2.1 A.1.b above) of each turbine in Units 1 through 5. At a minimum, the record should include the hours of operation on a monthly and rolling 12-month total basis. Records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 A.1.f above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain, at a minimum:
  - i. the monthly hours of operation of each turbine in Units 1 through 5 for the previous 17 months;
  - ii. the rolling 12-month total hours of operation of each turbine in Units 1 through 5 for the previous 17 months; and
  - iii. all instances of deviations from the requirements of this permit must be clearly identified.

<sup>1</sup> Initial testing occurred from May 9 to June 6, 2013. Test reference numbers 2013-048ST and 2013-145ST through 148ST.

**2. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS**

**(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)**

- a. To comply with this permit and to avoid applicability of 15A NCAC 02D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, nitrogen dioxide emissions from these sources **(ID Nos. ES-1A and B through ES-5A and B, i.e. Units 1 through 5)** shall be less than 245 tons total per consecutive 12-month period.

**Testing** [15A NCAC 02Q .0508(f)]

- b. The Permittee shall perform initial, periodic, and other quality assurance/quality control NO<sub>x</sub> emission testing as per Appendix E to Part 75. The Permittee shall conform to all details of the emissions testing and reporting requirements in General Condition JJ. If the results of any tests for NO<sub>x</sub> are above the limits given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. i. The Permittee shall monitor NO<sub>x</sub> emissions from Units 1 through 5 as per Appendix E to Part 75. In addition, nitrogen oxide emissions from turbine startup and shutdown, shall be calculated using the manufacturer's data assuming a loading/unloading rate of 5 MW per minute. Each startup and shutdown shall be recorded daily for each turbine. Total daily nitrogen oxide emissions shall equal startups plus shutdowns plus daily running load.
- ii. If the option to use a NO<sub>x</sub> CEMS is chosen, the Permittee shall monitor NO<sub>x</sub> emissions from Units 1 through 5 as per §60.4335(b) and 60.4345.

**Reporting** [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.2.c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain, at a minimum, the monthly NO<sub>x</sub> emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

**B. Two simple cycle, natural gas/No. 2 fuel oil-fired combustion turbines (ID Nos. ES-6A and B), each with associated water injection (ID No. CD-6A and CD-6B)**

The following table provides a summary of limits and standards for the emissions sources described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Visible emissions	20 percent opacity <b>See Section 2.2 A.1</b>	15A NCAC 02D .0521
Sulfur dioxide	<ul style="list-style-type: none"> <li>Any fuel: Not to exceed total sulfur content of 0.05 wt% (500 ppm); OR</li> <li>Any fuel: Not to exceed total sulfur content of 0.06 lb/MMBtu heat input; OR</li> <li>Exit gases: Not to discharge sulfur dioxide emissions in excess of 0.90 pounds per megawatt-hour gross output</li> </ul> <b>See Section 2.2 A.2</b>	15A NCAC 02D .0524 (40 CFR Part 60, Subpart KKKK)
	Phase II Acid Rain permit requirements <b>See Section 2.3</b>	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rules (CSAPR) requirements <b>See Section 2.4</b>	40 CFR Part 97, Subpart CCCCC
Nitrogen oxides	No. 2 fuel oil: 74 ppm at 15 percent O <sub>2</sub> (4-hour rolling average) Natural gas: 25 ppm at 15 percent O <sub>2</sub> (4-hour rolling average) <b>See Section 2.2 A.3</b>	15A NCAC 02D .0524 (40 CFR Part 60, Subpart KKKK)
	Phase II Acid Rain permit requirements <b>See Section 2.3</b>	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rules (CSAPR) requirements <b>See Section 2.4</b>	40 CFR Part 97, Subparts AAAAA and BBBBB
	BACT: <b>See Section 2.1 B.1</b> <ul style="list-style-type: none"> <li>Limit of 25 ppmvd @ 15% O<sub>2</sub> when firing natural gas (30 day rolling average)</li> <li>Limit of 42 ppmvd @ 15% O<sub>2</sub> when firing No. 2 fuel oil (30 day rolling average)</li> <li>Limit of 1,000 hours per year per turbine maximum operation when firing ultra-low sulfur No. 2 fuel oil for turbines in Unit 6, where hours represent non-startup/ shutdown periods</li> </ul>	15A NCAC 02D .0530
PM <sub>10</sub>	BACT: <b>See Section 2.1 B.1</b> <ul style="list-style-type: none"> <li>Use only pipeline quality natural gas</li> <li>Use only ultra-low sulfur (0.0015 % by wt) No. 2 fuel oil</li> <li>Limit of 1,000 hours per year per turbine maximum operation when firing ultra-low sulfur No. 2 fuel oil for turbines in Unit 6, where hours represent non-startup/ shutdown periods</li> </ul>	15A NCAC 02D .0530
PM <sub>2.5</sub>	BACT: <b>See Section 2.1 B.1</b> <ul style="list-style-type: none"> <li>Use only pipeline quality natural gas</li> <li>Use only ultra-low sulfur (0.0015 % by wt) No. 2 fuel</li> </ul>	15A NCAC 02D .0530

Regulated Pollutant	Limits/Standards	Applicable Regulations
	oil <ul style="list-style-type: none"> <li>Limit of 1,000 hours per year per turbine maximum operation when firing ultra-low sulfur No. 2 fuel oil for turbines in Unit 6, where hours represent non-startup/ shutdown periods</li> </ul>	
Carbon monoxide	BACT: <b>See Section 2.1 B.1</b> <ul style="list-style-type: none"> <li>Limit of 2,000 hours per year per turbine maximum operation when firing natural gas and a limit of 1,000 hours per year per turbine when firing ultra-low sulfur No. 2 fuel oil for turbines in Unit 6, where hours represent non-startup/shutdown periods</li> </ul>	15A NCAC 02D .0530
Greenhouse gases CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	Less than 75,000 tons CO <sub>2e</sub> per consecutive twelve-month period	15A NCAC 02Q .0317 (PSD Avoidance)
Toxic air pollutants	<b>State-enforceable only</b> <b>See Section 2.2 A.4</b>	15A NCAC 02D .1100

#### 1. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to comply with the best available control technology (BACT) determination pursuant to 15A NCAC 02D .0530, "Prevention of Significant Deterioration" from ID Nos. ES-6A and ES-6B (i.e. "Unit 6"), the Permittee shall comply with the following emission limits and operating requirements:
  - i. Filterable and condensable particulate (PM<sub>10</sub>) shall be controlled such that total shall not exceed 23.88 tons per consecutive 12-month period.
  - ii. Filterable and condensable particulate (PM<sub>10</sub>) shall be controlled such that total emissions shall not exceed 5.88 pounds per hour, per turbine when firing natural gas or 18.00 pounds per hour, per turbine when firing ultra-low sulfur No. 2 fuel oil.
  - iii. Filterable and condensable particulate (PM<sub>2.5</sub>) shall be controlled such that total emissions shall not exceed 23.88 tons per consecutive 12-month period.
  - iv. Filterable and condensable particulate (PM<sub>2.5</sub>) shall be controlled such that total emissions shall not exceed 5.88 pounds per hour, per turbine when firing natural gas or 18.00 pounds per hour, per turbine when firing ultra-low sulfur No. 2 fuel oil.
  - v. NO<sub>x</sub> emissions shall be controlled such that total emissions shall not exceed 82.43 tons per consecutive 12-month period.
  - vi. NO<sub>x</sub> emissions shall be limited to 25 ppmvd @ 15% O<sub>2</sub> when firing natural gas under steady-state, normal operating conditions, 30 day rolling average.
  - vii. NO<sub>x</sub> emissions shall be limited to 42 ppmvd @ 15% O<sub>2</sub> when firing No. 2 fuel oil under steady-state, normal operating conditions, 30 day rolling average.
  - viii. CO emissions shall be controlled such that total emissions shall not exceed 159.49 tons per consecutive 12-month period.
  - ix. CO emissions from each turbine in Unit 6 shall be less than the limits in Tables 1 and 2, below:

Table 1: While firing natural gas

Combustion turbine load	Less than or equal to 100% but greater than 75%			Less than or equal to 75% but greater than 50%			Less than or equal to 50%		
Ambient temperature (°F)	32	59	90	32	59	90	32	59	90
BACT CO Emission Limits (lb/hr)	61.12	45.48	43.82	79.74	64.5	48.05	78.85	63.34	57.72

Table 2: While firing ultra-low sulfur No. 2 fuel oil

Combustion turbine load	Less than or equal to 100% but greater than 75%			Less than or equal to 75% but greater than 50%			Less than or equal to 50%		
Ambient temperature (°F)	32	59	90	32	59	90	32	59	90
BACT CO Emission Limits (lb/hr)	13.23	10.25	8.83	16.11	12.52	10.11	18.97	15.35	12.07

- x. A. When turbines fire natural gas they shall fire pipeline quality natural gas.
- B. When turbines fire fuel oil they shall fire ultra-low sulfur (0.0015% by weight) No. 2 fuel oil.
- C. Each turbine in Unit 6 shall fire No. 2 fuel oil for no more than 1,000 hours per consecutive 12-month period, where hours represent non-startup/shutdown periods.
- D. Each turbine in Unit 6 shall fire natural gas for no more than 2,000 hours per year, where hours represent non-startup/shutdown periods

**Testing** [15A NCAC 02Q .0508(f)]

- b. The Permittee has completed initial performance testing for Unit 6 for PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and CO.<sup>2</sup>
- c. If additional emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. Each month, the Permittee shall record the hours of operation (as defined in Section 2.1 B.1.x above) of each turbine in Unit 6. At a minimum, the record should include the hours of operation on a monthly and rolling 12-month total basis. Records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.
- e. The Permittee shall demonstrate compliance with the NO<sub>x</sub> emission limits in Sections 2.1 B.1.a.vi and vii above using the continuous monitoring method specified in Sections 2.2 A.3.h and i below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the NO<sub>x</sub> emissions are not monitored.
- f. The Permittee shall demonstrate compliance with the fuel oil sulfur content limit in Section 2.1 B.1.a.x.B above using the monitoring method specified in Sections 2.2 A.2.h and i below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fuel oil sulfur content is not monitored.

**Reporting** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 B.1.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain, at a minimum:
  - i. the monthly hours of operation of each turbine in Unit 6 for the previous 17 months;
  - ii. the rolling 12-month total hours of operation of each turbine in Unit 6 for the previous 17 months; and
  - iii. all instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS**

**(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)**

- a. To comply with this permit and to avoid applicability of 15A NCAC 02D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, greenhouse gas emissions from the combustion

<sup>2</sup> Initial testing occurred between April 25 and May 3, 2013. Test reference number 2013-042ST.

turbines (**ID Nos. ES-6A and ES-6B**, i.e. Unit 6) shall be less than 75,000 tons of CO<sub>2</sub> equivalent total per consecutive 12-month period.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. Each calendar month, the Permittee shall calculate the monthly GHG emissions from Unit 6. The monthly GHG emissions must be calculated for each of the 12-month periods over the previous 17 months.
- d. Monthly GHG equivalent (CO<sub>2e</sub>) emissions shall be calculated as follows:

$$E_{CO_2e} = [A_{CO_2} + B_{CH_4} + C_{N_2O}] + [D_{CO_2} + E_{CH_4} + F_{N_2O}]$$

Where:

$E_{CO_2e}$  = Number of tons of CO<sub>2e</sub> per month

$A_{CO_2}$  = Monthly CO<sub>2e</sub> for Carbon Dioxide when firing natural gas

$B_{CH_4}$  = Monthly CO<sub>2e</sub> for Methane when firing natural gas

$C_{N_2O}$  = Monthly CO<sub>2e</sub> for Nitrous Oxide firing natural gas

$D_{CO_2}$  = Monthly CO<sub>2e</sub> for Carbon Dioxide firing No. 2 fuel oil

$E_{CH_4}$  = Monthly CO<sub>2e</sub> for Methane firing No. 2 fuel oil

$F_{N_2O}$  = Monthly CO<sub>2e</sub> for Nitrous Oxide when firing No. 2 fuel oil

- e. Carbon Dioxide monthly emissions for the number of hours operated during the month from the combustion turbines shall be calculated using Equation G-4 of Appendix G to 40 CFR 75 – Determination of CO<sub>2</sub> Emissions. Records shall be maintained in accordance with 40 CFR 75 Subpart F.
- f. Methane and Nitrous Oxide monthly emissions for the number of hours operated during the month from the combustion turbines shall be calculated utilizing the actual hourly heat input rate from fuel to the turbine, MMBtu/hr (based on Equations F-19 and F-20 of Appendix F to 40 CFR 75) and emissions factors outlined in 40 CFR 98 – Mandatory Greenhouse Gas Reporting Subpart C, Table C-2. Records shall be maintained in accordance with 40 CFR 98.3(g).
- g. Global warming potentials (GWPs) from 40 CFR Part 98 Table A-1 shall be used to convert monthly Methane and Nitrous Oxide emissions to the units of CO<sub>2e</sub>.
- h. The Permittee shall keep monthly records of the amount of fuel used, including certification of the fuel, in a logbook (written or in electronic format).  
The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if monthly GHG emissions are not calculated and recorded.

**Reporting** [15A NCAC 02Q .0508(f)]

- i. The Permittee shall submit a semi-annual summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.2.c through h above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain, at a minimum, the following:
  - i. The monthly CO<sub>2e</sub> emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
  - ii. The monthly quantities of natural gas and ultra-low sulfur No. 2 fuel oil consumed for the previous 17 months.

## 2.2 - Multiple Emission Sources Specific Limitations and Conditions

### A. Facility-wide emission sources

#### 1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from each of the twelve gas turbines (**ID Nos. ES-1A and B, through ES-6A and B**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas and/or No. 2 fuel oil in any turbine (**ID Nos. ES-1A and B, through ES-6A and B**).

#### 2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart KKKK – SO<sub>2</sub>)

- a. For the 12 combustion turbines (**ID Nos. ES-1A and B through ES-6A and B**, i.e. Units 1 through 6), the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart KKKK, including Subpart A "General Provisions".

**Emission Limitations** [40 CFR §60.4330(a)(1 and 2)]

- b. The Permittee shall not cause to be discharged into the atmosphere from any combustion turbine any gases which contain SO<sub>2</sub> in excess 0.90 pounds per megawatt-hour (lb/MWh) gross output, or
- c. The Permittee shall not burn in any of the combustion turbines, fuels that contain total potential sulfur dioxide emissions in excess of 0.06 pounds per million Btu heat input, or
- d. The Permittee shall not burn any fuel with a maximum sulfur content in excess of 0.05 wt% (500 ppmw).

**Testing** [15A NCAC 2Q .0508(f)]

- e. Initial performance testing has been completed at this facility for Units 1 through 6.<sup>3</sup>
- f. If additional emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Sections 2.2 A.2.b through d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f), 40 CFR 60.4360, .4365, and .4370]

- g. The Permittee shall monitor the total sulfur content of the fuel being fired in each turbine using the testing methods listed in Section 2.2 A.2.f above. If, during the most recent performance test, the sulfur content of the gaseous fuel was less than half of the applicable limit, the Permittee may use the methods listed in 40 CFR 60.4360 for the gaseous fuel.
- h. The Permittee may elect to not monitor the total sulfur content of the fuel, as required by Section 2.2 A.2.g above, if the fuel is demonstrated to not exceed the emission limit in Sections 2.2 A.2.b and c above. In order to make this demonstration, the Permittee must use either:

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<sup>3</sup> Initial testing for Units 1-5 occurred during October and November, 2007 (test reference numbers 2007-205ST, 2007-288ST through 290ST, and 2007-294ST). Initial testing for Unit 6 occurred during April 25 and May 3, 2013 (test reference number 2013-042ST).

- i. A valid purchase contract, tariff sheet, or transportation contract for the fuel. These must specify that the maximum total sulfur content is less than:
  - A. 0.05% by weight (500 ppmw) for oil, and
  - B. 20 grains of sulfur per 100 standard cubic feet for gas.
- ii. Representative fuel sampling data which demonstrates that the sulfur content of the fuel does not exceed the emission limit in Section 2.2 A.2.b.ii. At a minimum, the amount of fuel sampling specified in Sections 2.3.1.4. or 2.3.2.4. of 40 CFR Part 75, Appendix D (Appendix D) is required.
- i. When determining the sulfur content of the fuel, the frequency shall be as follows:
  - i. *Fuel oil*: The Permittee shall choose one of the sampling options and associated frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D.
  - ii. *Gaseous fuel*: If the Permittee elects not to demonstrate sulfur content using the options in Sections 2.2 A.2.h.i or ii, above, and the gaseous fuel is supplied without intermediate bulk storage, the sulfur content must be determined and recorded once per unit operating day.
  - iii. *Custom schedules*: Notwithstanding the requirements of Section 2.2 A.2.i.ii., above, the Permittee may develop a custom schedule for determining the total sulfur content of the gaseous fuel. The custom schedule must be approved by the Administrator and meet the requirements of 40 CFR 60.4370(c).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring requirements in Sections 2.2 A.2.g through i above are not completed or if they show an exceedance of the emission limit in Sections 2.2 A.2.b or c above.

**Excess Emissions and Monitor Downtime** [40 CFR 60.4385]

- j. If the Permittee chooses the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as:
  - i. For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
  - ii. If the option to sample each delivery of fuel oil has been selected, the Permittee must immediately switch to one of the other oil sampling options if the sulfur content of a delivery exceeds 0.05% by weight (500 ppmw). The Permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and the Permittee shall evaluate excess emissions according to Section 2.2 A.2.j.i., above.
  - iii. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- k. The results of all monitoring activities shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- l. All records shall specify which options the Permittee has chosen to demonstrate compliance with the emission limits, testing requirements, and monitoring requirements.  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f) and 40 CFR 60.4375]

- m. The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Excess emissions and monitor downtime are defined by 40 CFR 60.4385.
- n. The Permittee shall submit a summary report of monitoring and recordkeeping activities in Sections 2.2 A.2.g through l above postmarked on or before January 30 of each calendar year for the preceding six-



month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS  
(40 CFR Part 60, Subpart KKKK – NO<sub>x</sub>)**

- a. For the 12 combustion turbines (**ID Nos. ES-1A and B through ES-6A and B**, i.e. Units 1 through 6), the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart KKKK, including Subpart A "General Provisions".

**Emission Limitations** [40 CFR 60.4325; 60.4333]

- b. i. The Permittee shall not cause to be discharged into the atmosphere from any combustion turbine any gases which contain NO<sub>x</sub> emissions in excess of 25 ppm at 15 percent O<sub>2</sub> (4-hour rolling average) when firing more than 50 percent natural gas and/or
- ii. The Permittee shall not cause to be discharged into the atmosphere from any combustion turbine any gases which contain NO<sub>x</sub> emissions in excess of 74 ppm at 15 percent O<sub>2</sub> (4-hour rolling average) when firing more than 50 percent No. 2 fuel oil.
- c. The Permittee shall operate each combustion turbine and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

**Testing** [15A NCAC 02Q .0508(f), 40 CFR 60.4340(a), (b), and .4400]

- d. Initial performance testing has been completed at this facility for Units 1 through 6.<sup>4</sup>
- e. When the Permittee is demonstrating compliance by using the optional NO<sub>x</sub> emissions estimation allowed by 40 CFR Part 75, Appendix E, the Permittee shall retest the NO<sub>x</sub> emission rate while combusting each type of fuel (or fuel mixture) for which a NO<sub>x</sub> emission rate versus heat input rate correlation curve was derived, at least once every 20 calendar quarters. Each time that a new fuel-specific correlation curve is derived from retesting, the new curve shall be used to report NO<sub>x</sub> emission rate, beginning with the first operating hour in which the fuel is combusted, following the completion of the retest. The retests shall be conducted according to the procedures in 40 CFR Part 75, Appendix E, Section 2.
- f. When the Permittee is demonstrating compliance by using the continuous monitoring system allowed by §60.4335(a) or by using the continuous emission monitoring system (CEMS) allowed by §60.4335(b), the Permittee shall conduct subsequent performance tests no more than 14 calendar months following the previous performance test.
- g. If additional emission testing is required, the testing shall be performed in accordance with General Condition JJ.

If the required emission testing is not performed or the results of any test are above the limits given in Sections 2.2 A.3.b and c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f), 40 CFR 60.4335, 60.4340, 60.4345, 60.4350, and 60.4355 and 40 CFR Part 75, Appendix E]

- h. The Permittee shall choose to monitor NO<sub>x</sub> emissions by:
- i. Using a continuous monitoring system to monitor parameters as listed in 40 CFR 60.4335(a); or
- ii. Using a continuous emission monitoring system (CEMS) per 40 CFR 60.4335(b); or
- iii. Follow the requirements of 40 CFR Part 75, Appendix E "Optional NO<sub>x</sub> Emissions Estimation Protocol for Gas-Fired Peaking Units and Oil-Fired Peaking Units" (Appendix E).<sup>5</sup>

<sup>4</sup> Ibid.

<sup>5</sup> The Permittee has historically chosen the methods in Appendix E as the compliance demonstration method.

- i. When the Permittee is following the requirements of Appendix E:
    - i. Each turbine using the Optional Protocol must meet the definition of "Peaking Unit" as defined in 40 CFR 72.2: "A unit that has an average capacity factor of no more than 10.0 percent during the previous three calendar years and a capacity factor of no more than 20.0 percent in each of those calendar years."
    - ii. The Permittee shall monitor and record for each hour the unit is combusting fuel:
      - A. The time;
      - B. The load on the unit;
      - C. Fuel flow rate;
      - D. Heat input rate for each fuel combusted to the nearest 0.1 MMBtu/hr; and
      - E. Any additional operating parameters chosen in accordance with Appendix E, Section 2.3.1.
    - iii. Determine and record the hourly NO<sub>x</sub> emission rate using the procedures in Appendix E, Section 2.4.
    - iv. In the event of missing data or an operating parameter outside the limits determined by testing, the Permittee shall use the procedures in 40 CFR Part 75, Appendix E, Section 2.5. to determine the hourly NO<sub>x</sub> emission rate.
    - v. The Permittee shall develop and record a QA plan as described in Appendix E, Section 2.3.
    - vi. The Permittee shall keep records of average capacity factor for each unit for the current and the previous three years in order to demonstrate that each unit meets the definition of "Peaking Unit".
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring and recordkeeping requirements in Sections 2.2 A.3.h and i above, are not completed or if they show an exceedance of the emission limit in Section 2.2 A.3.b above.

**Excess Emissions and Monitor Downtime** [40 CFR 60.4380]

- j. When the Permittee is demonstrating compliance with the emission limits by using parameter monitoring as allowed by 40 CFR 60.4335(a), periods of excess emissions and monitor downtime that must be reported are defined by 40 CFR 60.4380(a).
- k. When the Permittee is demonstrating compliance with the emission limits by using a NO<sub>x</sub> CEMS, periods of excess emissions and monitor downtime that must be reported are defined by 40 CFR 60.4380(b).
- l. When the Permittee is demonstrating compliance with the emission limits by using the provisions of Appendix E, periods of excess emissions and monitor downtime that must be reported are defined by the same conditions as for a NO<sub>x</sub> CEMS.

**Reporting** [15A NCAC 02Q .0508(f), 40 CFR 60.4375 and 40 CFR Part 75, Appendix E]

- m. The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Excess emissions and monitor downtime are defined by 40 CFR 60.4380.
- n. The Permittee shall submit a summary report of monitoring and recordkeeping activities in Sections 2.2 A.3.h through l above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**State-Enforceable Only**

**4. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS**

- a. The Permittee has submitted a toxic air pollutant dispersion modeling analysis dated October 22, 2010 for the facility's toxic air pollutant emissions as listed in the below table. The modeling analysis was reviewed and approved by the AQAB on August 24, 2011. Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.

Table 1: North Carolina Toxics Analysis

Emission Source	Pollutant	Averaging Period	Emission Rate
ES-1A and B, ES-2A and B, ES-3A and B, ES-4A and B, ES-5A and B, ES-6A and B, IES-13	Acrolein	1-hour	0.0241 lb/hour
	Chromium	24-hour	0.906 lb/day
	Formaldehyde	1-hour	1.04 lb/hour
	Mercury	24-hour	0.0988 lb/day
	Nickel	24-hour	0.379 lb/day
	Sulfuric Acid	1-hour	3.48 lb/hour
		24-hour	83.5 lb/day
	1,3 Butadiene	Annual	58.40 lb/year
	Benzene	Annual	207.0 lb/year
	Arsenic	Annual	40.13 lb/year
	Beryllium	Annual	1.13 lb/year
	Cadmium	Annual	18.14 lb/year

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02D .0605]

- b. No monitoring/recordkeeping/reporting is required to show compliance with the toxic air pollutant emission limits.

## 2.3 - Phase II Acid Rain Permit Requirements

ORIS code: 56292

Effective: TBD until TBD+5 years, same as TV permit

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q .0400 and 02Q .0500, and other applicable Laws.

2. SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each affected unit

Source	Pollutant	Emission Limit
ID No. ES-1A, ID No. ES-1B ID No. ES-2A, ID No. ES-2B ID No. ES-3A, ID No. ES-3B	SO <sub>2</sub>	SO <sub>2</sub> allowances are not allocated by U.S. EPA for new units under 40 CFR Part 72.
ID No. ES-4A, ID No. ES-4B ID No. ES-5A, ID No. ES-5B ID No. ES-6A, ID No. ES-6B	NO <sub>x</sub>	Does not apply for combustion turbine units.

3. Phase II Permit Applications (attached)

The Acid Rain Permit Application submitted for this facility, as approved by the Division of Air Quality, is part of this permit. The owners and operators of these Phase II acid rain sources must comply with the standard requirements and special provisions set forth in the attached applications.

**Federal-Enforceable Only**

## 2.4 - Cross State Air Pollution Rule (CSAPR) Permit Requirements

For the twelve combustion turbines (**ID Nos. ES-1A and B through ES-6A and B**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NO<sub>x</sub> Annual Trading Program", Subpart BBBBB "TR NO<sub>x</sub> Ozone Season Trading Program", and Subpart CCCCC "TR SO<sub>2</sub> Group 1 Trading Program".

## 2.5 - Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following non-applicable requirements:

1. The EPA's Clean Air Interstate Rules (CAIR) are not applicable to the combustion turbines twelve combustion turbines (**ID Nos. ES-1A and B through ES-6A and B**; i.e. Units 1 through 6), pursuant to 40 CFR 52.35(f) and 52.36(e). CAIR has been replaced by the Cross State Air Pollution Rule (CSAPR).

[15A NCAC 02Q .0512(a)(1)(B)]

## SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements  
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application;
  - b. changes that modify equipment or processes; or
  - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]  
The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

**I.A Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]  
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

**I.B Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

**J. Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall



comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

**Q. Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**R. Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

**S. Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

**T. Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

**U. Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

**V. Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

**KK. Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

**LL. Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

**MM. Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

**NN. Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

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## ATTACHMENT 1

### List of Acronyms

<b>AOS</b>	Alternative Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAIR</b>	Clean Air Interstate Rule
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound

**ATTACHMENT 2**

**Acid Rain Permit Application**

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